Message

From: Sanga, Ravi [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=94FC8A3DE5994339AF563FF14098A8F8-SANGA, RAVI]

Sent: 5/5/2021 4:04:59 PM

To: Alison Osullivan [aosullivan@suquamish.nsn.us]

CC: dtaylor@suquamish.nsn.us; Unknown [Glen@muckleshoot.nsn.us]; glen.stamant@muckleshoot.nsn.us

Subject: RE: Draft East Waterway Anthropogenic Background Evaluation Memo

Hi I would like to schedule a conversation to discuss these comments further. Let me know when you are available.

From: Alison Osullivan <aosullivan@suquamish.nsn.us>

Sent: Friday, April 30, 2021 6:36 PM **To:** Sanga, Ravi < Sanga. Ravi@epa.gov>

Cc: dtaylor@suquamish.nsn.us; Unknown <Glen@muckleshoot.nsn.us>; glen.stamant@muckleshoot.nsn.us

Subject: RE: Draft East Waterway Anthropogenic Background Evaluation Memo

Ravi, thank you for the additional time to review the AB memo. Below are the Suquamish Tribe (Tribe) comments.

General Comments:

- The Document needs to clearly state that the East Waterway AB values are site-specific for the EW site and are not appropriate for use at other sites or as precedent for replacing natural background values. The Tribe supports the use of risk-based clean up levels that are protective of Suquamish tribal members, or natural background values as represented by the BOLD data set and accepted by EPA and ECY for use in establishing clean up levels for Puget Sound sites, where risk-based levels are below natural background conditions.
- It is the Tribes understanding that a revised draft Proposed Plan that includes the AB values has been prepared. When will EPA be providing this to the Tribe for review? It is not appropriate to distribute a draft Proposed Plan including the proposed AB values prior to finalizing the AB technical memo.
- The Tribe has read through the comments submitted by the Department of Ecology (Ecology) via email on April 7, 2021. It appears that there are significant concerns regarding the development of AB values. The Tribe strongly suggests that a meeting be scheduled with EPA and Ecology to address these comments and include both the Suquamish Tribe and Muckleshoot Tribe.

Specific Comments:

Section 2, Page 3: Why is "future case" in quotes? The reduction of total suspended solid inputs from EW laterals and source control actions in stormwater drainage basins are an important part of remediation and restoration of the EW. Include any updated source control information from Ecology that may affect AB estimates. Also, there will be a source control sufficiency evaluation to determine if the potential for recontamination from these sources has been or will be reduced enough to ensure that the sediment remediation is effective. Remove the quotation marks and discuss the source control sufficiency evaluation. Note that it is not Figure 1 in Appendix J it is Chart 1.

Sections 4.4 and 5.6: If arsenic is naturally occurring as stated in the text and arsenic concentrations in Green River suspended solids are higher than those found in EW bedded sediments as well as at several completed cleanup sites in Elliott Bay, it is not appropriate that a PRG for arsenic based on AB would be set at a higher level than what is already present in bedded sediments at the site and has been proven achievable at other cleanup sites.

Section 4.8, Page 24: Include decisions made regarding arsenic in the list of selected data treatments.

Section 5: The uncertainty/sensitivity discussion should look at all the decisions made related to the treatment of data, as summarized in Section 4.8 (with the inclusion of arsenic). Include discussions for uncertainty/sensitivity introduced by decisions made regarding non-detects for PCBs and dioxin/furans, as well as the decisions to evaluate dioxin/furans as individual congeners and to use four congeners to represent all dioxin/furans.

Section 5.7, Page 27: Implying that new development within the watershed could result in an increase in contaminant contributions should not be a factor to support AB. In addition to the superfund cleanup activities in the Duwamish to improve conditions and reduce contamination King County is under a consent decree to address pollutant reductions including toxic organic compounds (PCBs, PBDEs, semi-volatile organic compounds and pesticides). Delete the last sentence.

Section 5.9, Page 28: Add a discussion of the overall impact of all the decisions regarding data treatment. Are the AB values for each contaminant expected to be generally biased high or low? Summarize the overall site impacts and/or changes to cleanup expected from use of the AB values.

| Alison O'Sullivan, Senior Biologist | Denice Taylor, Environmental Scientist |
|--|--|
| Suquamish Tribe Natural Resources D | Department |
| S Charles and the Control of the Con | |
| | |
| | |

P.O. Box 498 (mailing) 18490 Suquamish Way Suquamish, WA 98392 phone: (360) 394-8447

This email is intended exclusively for the individual(s) or entities to whom it is addressed and may contain confidential information and/or privileged information. If you are not the intended recipient or agent responsible for delivering it to the intended recipient, be advised that any use, dissemination, distribution, copying or taking of any action in reliance on the contents of this transmission is strictly prohibited. If you have received this communication in error, please immediately notify the sender electronically, return the email to the above email address and delete it from your files. Thank you.

From: Sanga, Ravi <<u>Sanga.Ravi@epa.gov</u>> Sent: Thursday, April 8, 2021 9:15 AM

To: Alison Osullivan <a osullivan@suguamish.nsn.us>; Denice Taylor dtaylor@suguamish.nsn.us;

glen.stamant@muckleshoot.nsn.us; Unknown <Glen@muckleshoot.nsn.us>

Subject: RE: Draft East Waterway Anthropogenic Background Evaluation Memo

When can you send comments?

From: Alison Osullivan <aosullivan@suguamish.nsn.us>

Sent: Wednesday, April 07, 2021 2:56 PM

To: Sanga, Ravi <Sanga.Ravi@epa.gov>; dtaylor@suquamish.nsn.us; glen.stamant@muckleshoot.nsn.us; Unknown

<Glen@muckleshoot.nsn.us>

Subject: RE: Draft East Waterway Anthropogenic Background Evaluation Memo

We will need more time on this.

Thanks,

Alison

From: Sanga, Ravi < Sanga.Ravi@epa.gov > Sent: Tuesday, March 16, 2021 5:07 PM

To: Alison Osullivan <aosullivan@suguamish.nsn.us>; Denice Taylor <dtaylor@suguamish.nsn.us>;

glen.stamant@muckleshoot.nsn.us; Unknown < Glen@muckleshoot.nsn.us>
Subject: FW: Draft East Waterway Anthropogenic Background Evaluation Memo

Alison Glen and Denice Here are the figures and the word files associated with the EW AB Memo. I think if we get comments back by April 10th, that would work for EPA, but if you need longer, let me know.

From: Greg Brunkhorst <gbrunkhorst@anchorgea.com>

Sent: Friday, March 05, 2021 1:23 PM

To: Sanga, Ravi <Sanga.Ravi@epa.gov>; dberlin@anchorqea.com

Cc: Brick Spangler < Spangler B@portseattle.org>; florer.i@portseattle.org; debra.williston@kingcounty.gov;

jeff.stern@kingcounty.gov; pete.rude@seattle.gov; allison.crowley@seattle.gov; Merv Coover

<merv.coover@erm.com>; dchiavelli@anchorqea.com; Allen, Elizabeth <allen.elizabeth@epa.gov>; Gardiner, William W

CIV USARMY CENWS (USA) < William. W. Gardiner@usace.army.mil>

Subject: RE: Draft East Waterway Anthropogenic Background Evaluation Memo

Ravi, apologies for not letting you know sooner on these changes.

First, note that the value for PCBs is 31 ug/kg (as shown in the Executive Summary and Table 6-1) rather than 32 ug/kg (as shown in the Section 6 text). This is a typo that has been corrected in the attached PDF file.

Three things changed the total PCBs and arsenic values slightly during the final QC and review process.

- 1. We performed final QC of the USGS percent fines data. In that process, we updated some percent fines sample values based on a correspondence with Kathy Conn last month. We were previously pulling from a database file provided by USGS, but Kathy pointed us to Table 2 in uspended-Sediment Transport from the Green-Duwamish River to the Lower Duwamish Waterway, Seattle, Washington, 2013–17 (usgs.gov) which contained final summarized percent fines data, which differed slightly from the database for several samples.
- 2. We performed the final ProUCL runs on the final dataset and selected statistical treatments that could be consistently applied to the UCLs and UTLs. The notes to Table 6-1 have additional details on the statistical treatments selected.
- 3. We rounded to 2 digits.

Let us know if you would like to discuss further.

Greg

Greg Brunkhorst, PE

ANCHOR QEA, LLC 1119 Pacific Avenue, Suite 1600 Tacoma, WA 98402

C Ex. 6 Personal Privacy (PP)

D 206.971.2668

This electronic message transmission contains information that may be confidential and/or privileged work product prepared in anticipation of litigation. The information is intended for the use of the individual or entity named above. If you are not the intended recipient, please be aware that any disclosure, copying

distribution or use of the contents of this information is prohibited. If you have received this electronic transmission in error, please notify us by telephone at (206) 287-9130.

From: Sanga, Ravi < Sanga.Ravi@epa.gov>
Sent: Friday, March 5, 2021 8:50 AM
To: Dan Berlin < dberlin@anchorgea.com>

Cc: Brick Spangler <Spangler.B@portseattle.org>; Joanna Florer <florer.j@portseattle.org>; Debra Williston - Work <debra.williston@kingcounty.gov>; Jeff Stern <jeff.stern@kingcounty.gov>; Pete Rude <pete.rude@seattle.gov>; Allison Crowley <allison.crowley@seattle.gov>; Merv Coover <merv.coover@erm.com>; Greg Brunkhorst qbrunkhorst@anchorgea.com); Deborah Chiavelli dchiavelli@anchorgea.com); Allen, Elizabeth allen.elizabeth@epa.gov); Gardiner, William W CIV USARMY CENWS (USA) <William.W.Gardiner@usace.army.mil>

Subject: RE: Draft East Waterway Anthropogenic Background Evaluation Memo

CAUTION – **EXTERNAL EMAIL**: This email originated from outside of Anchor QEA. Please exercise caution with links and attachments.

Hi Dan We need the word version and the spreadsheet. Can we set up a quick call today before 2 to discuss why the numbers changes from 29.3 and 19.3 to 32 and 20 for PCBs and As?

From: Dan Berlin < dberlin@anchorgea.com Sent: Thursday, March 04, 2021 5:54 PM
To: Sanga, Ravi Sanga, Ravi@epa.gov

Cc: Brick Spangler < Spangler. B@portseattle.org>; florer.j@portseattle.org; debra.williston@kingcounty.gov; jeff.stern@kingcounty.gov; pete.rude@seattle.gov; allison.crowley@seattle.gov; Merv Coover

<merv.coover@erm.com>; Greg Brunkhorst <gbrunkhorst@anchorgea.com>; dchiavelli@anchorgea.com

Subject: RE: Draft East Waterway Anthropogenic Background Evaluation Memo

Ravi, do you also want word and excel files for the memo, or will you be making comments in the pdf or in a letter/table format?

Thanks Dan

Dan Berlin, PWS

Principal

ANCHOR QEA, LLC

From: Dan Berlin

Sent: Thursday, March 4, 2021 5:52 PM

To: sanga.ravi@epa.gov

Cc: Brick Spangler Spangler.B@portseattle.org; Joanna Florer florer.j@portseattle.org; Debra Williston - Work <debra.williston@kingcounty.gov</pre>; Jeff Stern jeff.stern@kingcounty.gov; Pete Rude pete.rude@seattle.gov; Allison Crowley <allison.crowley@seattle.gov</pre>; Merv Coover merv.coover@erm.com; Greg Brunkhorst gbrunkhorst@anchorgea.com; Deborah Chiavelli dchiavelli@anchorgea.com

Subject: Draft East Waterway Anthropogenic Background Evaluation Memo

Ravi,

Attached is the draft East Waterway Anthropogenic Background Evaluation Memo. I believe you said you would forward to others for review. Please let us know if you need anything else and when you think you may have comments back for us.

Thanks

Dan

Dan Berlin, PWS

Principal

ANCHOR QEA, LLC 1201 3rd Avenue, Suite 2600 Seattle, WA 98101

T 206.287.9130
D 206.903.3322
C Ex. 6 Personal Privacy (PP)